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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,790	12/31/2001	Robert J. Belmares	P-A626-CIP	2973

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EXAMINER
HUNG, YUBIN

ART UNIT	PAPER NUMBER
2625	2

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/038,790	Applicant(s) BELMARES, ROBERT J.
	Examiner Yubin Hung	Art Unit 2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/31/01* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to because in both Figs. 4 & 5 the rows are incorrectly labeled (with respect to how they are referenced in the description). They should be labeled as R2-1, R2-2, etc. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference 46 in Fig.4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: on page 9, line 18 the phrase "with row" should have been "with sum." Appropriate correction is required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-9 & 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 & 14 of U.S. Patent No. 6,335,976. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

Regarding Claims 1-6, the corresponding claims in the application and the patent are identical except that Claims 1 and 5 of the application use the term "benchmark image" while the same claims in the said patent use the term "first image." As disclosed in page 2 lines 11-12 of the application the term "first" and "benchmark" could be the same. Furthermore, "first" is not a clearly defined term; for practical purpose, any image taken as the benchmark can be considered as the first image to be compared with subsequent images. Therefore, claims 1-6 are of the same or have a broader scope than that of the corresponding claims in the parent application and consequently have been fully disclosed.

Specifically, Claim 1 of US 6,335,976 discloses

A method for monitoring a field of view for visible changes, comprising in combination the steps of:

taking a first image in a predetermined manner of the field of view to be monitored;

dividing the first image into a plurality of cells;

taking a second image in the predetermined manner of the field of view to be monitored after creating the first image;

dividing the second image into the plurality of cells;

comparing predetermined groups of cells of the second image to the same predetermined groups of cells of the first image;

giving each cell of the first image a numerical value based upon the information in each cell;

giving each cell of the second image a numerical value based upon the information in each cell;

giving each group of cells a numerical value based upon the numerical value of the cells within that group; and

wherein comparing predetermined groups of cells of the second image to the same predetermined groups of cells in the first image comprises computing the difference between the numerical values of each group of cells in the second image and in the first image.

Comparing this with Claim 1 of the application, it is clear that the only difference is that "benchmark image", rather than "first image," is used in the application.

Similar analysis reveals that Claims 2- 6 of US 6,335,976 read on Claims 2-6 of the application.

Claim 7 are rejected over Claims 8 of US 6,335,976 because they set forth subject matters that are obvious over each other and only differ in that Claim 8 of US '976 also requires that the number of changed areas exceeds a predetermined number. Claims 8-9 and 11 are rejected for similar reason.

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 12-14 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 14-16 of prior U.S. Patent No. 6,335,976. This is a double patenting rejection.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Monroe (US 6,545,601).

Monroe anticipates Claim 10 by disclosing a method that monitors a field of view by capturing video frames (i.e., images) of the area being monitored repeatedly and comparing the differences (in terms of edge characteristics) between those captured frames.

Specifically, Claim 10 comprises

- Take a benchmark image and a second image

  (See Monroe Col.11, line 60. Note that Monroe can take only two images with the first being the "benchmark" and the next the "second")
- Determine the "image mass" (i.e., any applicable image measurement) of the images

  (Monroe uses edge characteristics as the metric. See Col.11, lines 61-64)
- Compare the image masses of the two images

  (In Col.11, lines 61 Monroe compares the difference between images)

Claim 15 is rejected under 35 U.S.C. 102(e) as being anticipated by Koller (US 6,130,707).

Koller anticipates Claim 15 by disclosing a method that takes a reference (i.e., benchmark) image and another (the "second") image, divides them into cells, assigns a numeric value to each cell, and sums the numeric differences of the corresponding cells of the images.

Specifically, Claim 15 comprises

- Take a benchmark image, divide it into multiple cells, assign a numerical value to each cell and sum the values
  (See Figs. 3A-3C of Koller)
- Take another image, divide it into multiple cells, assign a numerical value to each cell and sum the values
  (See Figs. 3A-3C of Koller)
- Compare the sums of the two images
  (See Fig.4 of Koller. Note the summing of the numeric differences in Element 430 is equivalent to comparing the sums of the cells of the respective images in Claim 15)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 6,545,601) in view of DiPoala (US 5,581,237).

As per Claim 11, Monroe, discussed above, discloses everything except for the determination of a cyclical change. However, DiPoala teaches the use of a detector in an intrusion detection system to identify the presence of a periodic signal (i.e., a cyclical change) to minimize the false alarm rate. Therefore it would have been obvious to one of an ordinary skill in the art at the time of the invention to modify Monroe with the inclusion of a cyclical-change-detection means (such as taught by DiPoala) to identify and ignore periodic motions, such as might occur when a revolving fan is present, in the area under surveillance in order to reduce false alarms.

Specifically, Claim 11 comprises

- Take a sequence of images and assign an image mass to each image (Per Monroe. See discussion re Claim 10 above)
- compare the difference of pairs of images in the sequence (Per Monroe. See discussion re Claim 10 above)
- determine whether a cyclical change exists in the sequence (See Col.1, lines 62-65 and Col. 2, lines 1-11 of DiPoala)

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 5471239 (Hill, et al) discloses ways to detect scene changes
- US 5880775 (Ross) discloses ways to detect scene changes that also makes use of thresholds
- US 6356664 (Dunn) discusses the differentiation of motion of interest and "uniform" motion, which should be ignored, in the area under surveillance
- JP 11004442 (Watabe, et al) discusses the concept of "exclusion area" in an area under surveillance in which changes in the scene should not trigger an alarm

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (703) 305-1896. The examiner can normally be reached on 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Y.H.
June 26, 2003

BHAVESH M. MEHTA
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